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Serial No. 10/786,450 Filed: February 25, 2004

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REMARKS

The Examiner is thanked for the thorough examination of the present application. The Examiner is also thanked for the courtesies extended during the telephonic interview of September 20, 2010, during which the current claim rejections were discussed and during which the Examiner agreed that the objection to the drawings would be withdrawn as the drawings disclose each feature specified in the claims.

Additionally, the independent claims have been amended along the lines discussed during the telephonic interview to further define over the prior art. Dependent Claims 5, 14, 21, and 28 have been cancelled, and dependent Claims 6, 7, 15, 16, 22, 23, 29, and 30 have been amended for consistency. Independent Claims 1, 10, 17, and 24 have also been amended along the lines suggested by the Examiner to recite a "sending attempt rate" to clarify the term "sending rate." Computer-readable medium Claims 24-27, and 29-30 have been amended to include "non-transitory." No new matter is being added. The patentability of the claims is discussed below.

I. The Claimed Invention

The invention, as recited in amended independent Claim 1, for example, is directed to a communications system which includes at least one destination server for hosting a plurality of electronic mail (email) message boxes, and a plurality of communications devices for generating email messages each associated with a respective message box. The system further includes a delivery server including a plurality of queues and a

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controller. More particularly, the controller is for storing the email messages generated by the communications devices in a first queue, and attempting to send the stored email messages to the at least one destination server at a first sending attempt rate. The controller also moves email messages stored in the first queue to a second queue based upon receipt of a delivery failure message.

The controller then attempts to send email messages stored in the second queue to the at least one destination server at a second sending attempt rate that is less than the first sending attempt rate. The second queue is one of a plurality of queues arranged in a hierarchy. Each queue in the plurality of queues has a storage interval that successively increases from a highest queue to a lowest queue.

The controller also moves email messages from a higher queue to a next lower queue after being stored in the higher queue for a duration of its storage interval. The controller also advantageously moves email messages having a common characteristic with a successfully delivered email message to the first queue.

Amended independent Claim 10 is directed to a corresponding delivery server of independent Claim 1. Amended independent Claim 17 is directed to a corresponding method of independent Claim 1, and amended independent Claim 24 is directed to a related computer-readable medium. Independent Claims 10, 17, and 24 have been amended similarly to amended independent Claim 1.

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II. The Amended Claims Are Patentable

The Examiner rejected former dependent Claims 5, 14, 21 and 28 over a three-way combination of Shaw et al., D'Souza et al., and Sherwood. Shaw et al. is directed to an enterprise email management system for handling large volumes of email, responding through enterprise email system users or automated processes. The Examiner correctly recognized that Shaw et al. fails to disclose storing the email messages generated by the communications device in a first queue, and attempting to send the stored email messages to the at least one destination server at a first sending rate.

The Examiner further correctly recognized that Shaw et al. fails to disclose that second queue being one of a plurality of queues arranged in a hierarchy, wherein each of the plurality of hierarchal queues has a storage interval that successively increases from a highest queue to a lowest queue. The Examiner recognized that Shaw et al. fails to disclose attempting to send email messages stored in the second queue to the at least one destination server at a second sending rate less than the first sending rate. The Examiner still further correctly recognized that Shaw et al. fails to disclose that moving email messages stored in the first queue to the second queue based upon receipt of a delivery failure message, and moving email messages having a common characteristic with a successfully delivered email message to the first queue. The Examiner also recognized that Shaw et al. fails to disclose moving email messages from a higher queue to a next lower queue after being stored in the higher queue for

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a duration of its storage interval. The Examiner then turned to D'Souza et al. for some of these critical deficiencies.

D'Souza et al. is directed to a system and method of mitigating attacks, such as denial of service attacks in a communications network. More particularly, D'Souza et al. discloses monitoring source addresses of packets in a network and comparing the source addresses to known legitimate addresses. If a source address is known as being legitimate, the packets are placed in a high priority queue for transmission at the highest rate. Packets with unknown addresses are placed in a lower priority queue and the packet serviced at a lower rate.

The Examiner further correctly recognized that even a selective combination of Shaw et al. and D'Souza et al. fails to disclose that moving email messages stored in the first queue to a second queue is based upon receipt of a delivery failure message, and moving email messages having a common characteristic with a successfully delivered email message from the second queue to the first queue. The Examiner turned to Sherwood in an attempt to supply these critical deficiencies.

Sherwood is directed to a system for selective application of email delivery options. More particularly, Sherwood discloses a system for selectively applying delivery options to addresses in an email, for example, selectively applying a delivery confirmation and/or return receipt for an email address.

Independent Claims 1, 10, 17, and 24 have been amended to recite that the second queue is on of a plurality of queues arranged in a hierarchy. Independent Claims 1, 10, 17, and 24

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have also been amended to recite and each queue in the plurality of queues has a storage interval that successively increases from a highest queue to a lowest queue, and moving email messages from a higher queue to a next lower queue after being stored in the higher queue for a duration of its storage interval.

Applicant submits that even a selective combination of the prior art fails to disclose each queue of the plurality of queues having a storage interval that successively increases from a highest queue to a lowest queue, and moving email messages stored in a higher queue in the hierarchy to a next lower queue after being stored in the higher queue for a duration of the storage interval. Instead, D'Souza et al. discloses packets being sent to different queues, one of which is serviced at a highest rate, and another of which being serviced at a lower rate. (See D'Souza et al., paragraph 0028). "To move from one group to the next, a client must prove itself to be legitimate." (See D'Souza et al., paragraph 0029, and FIG. 3). More particularly, if a packet is found to be "good," i.e. found in a "good" table, the packet is placed in a higher bandwidth queue, and as a result is serviced at a higher rate. (See D'Souza et al., paragraph 0030). Moreover, "bad" packets can be moved to the "good" table if it turns out the packets are from a legitimate source. (See D'Souza et al., paragraph 0030). Nowhere in D'Souza et al. does it disclose each queue of the plurality of queues having a storage interval that successively increases from a highest queue to a lowest queue, and moving email messages stored in a higher queue in the hierarchy to a next lower queue after being stored in the higher queue for a

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<u>duration of the storage interval</u>. Accordingly, amended independent Claims 1, 10, 17, and 24 are patentable.

Applicant further submits that the Examiner's combination of references is improper. More particularly, a person having ordinary skill in the art would not turn to Sherwood to supply the critical deficiencies of Shaw et al, and D'Souza et al., and even turn to D'Souza et al. to combine with Shaw et al. Sherwood is directed to a system for applying delivery options to addressees in an email. More particularly, Sherwood discloses selecting an option of delivery confirmation and return receipt for an addressee. Sherwood is not directed to sending the email, as it is sent using "the conventional email composition and sending process."

In stark contrast, D'Souza et al. is directed to a queuing method for mitigation of packet spoofing. More particularly, D'Souza et al. attempts to mitigate attacks such as Denial of Service attacks by examining all incoming packets. In stark contrast from both D'Souza et al. and Sherwood, Shaw et al. is directed to an enterprise email management system for handling large volumes of email. Indeed, the Examiner is using impermissible hindsight reconstruction based on motivation provided by Applicant's own specification in an attempt to produce the claimed invention by selectively assembling disjoint pieces of the prior art. Accordingly, the Examiner's combination of references is improper.

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CONCLUSION

In view of the amendments to the claims and the arguments provided herein, it is submitted that all the claims are patentable. Accordingly, a Notice of Allowance is requested in due course. Should any minor informalities need to be addressed, the Examiner is encouraged to contact the undersigned attorney at the telephone number listed below.

Respectfully submitted,

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